

Claims

1. Method for supplying a paint application device with paint, in which  
5  
a) a given paint volume in each case is conveyed between two pigs through a pig line from a first pig station connectable to the paint supply source to a second pig station connectable to the paint application device;  
10  
b) the pig line is cleaned on the return path of the pigs from the second to the first pig station by means of a given quantity of cleaning agent that is conveyed by at least one pig;  
15  
c) the pigs are conducted through the pig line by a pressurised pushing medium,  
20 characterised in that  
d) on its return from the second pig station (7a, 7b) to the first pig station (6a, 6b) the cleaning agent is transported between the two pigs (10a, 11a, 10b, 11b).  
25
2. Method according to claim 1, characterised in that a liquid solvent is used as the cleaning agent.
- 30 3. Method according to claim 1 or 2, characterised in that compressed air is used as the pushing medium for the pigs (10a, 11a, 10b, 11b).

4. Method according to claim 3, characterised in that the velocity of the pigs (10a, 11a, 10b, 11b) is adjusted by appropriately throttling the expulsion of air from the flow paths (29a, 35a, 43a, 46a, 29b, 35b, 43b, 46b) located ahead of the pig (10a, 11a, 10b, 11b).
5. Method according to any one of the preceding claims, characterised in that as the paint is introduced into the space between the two pigs (10a, 11a, 10b, 11b) in the first pig station (6a, 6b) the pressurised paint is used as the pushing medium for the leading pig (10a, 10b).
6. Method according to claim 5, characterised in that the quantity of paint used as the pushing medium is measured and the supply of paint to the space between the two pigs (10a, 11a, 10b, 11b) is ended when the desired quantity of paint has been introduced, and in that the trailing pig (11a, 11b), together with the paint volume and the leading pig (10a, 10b), is then moved by the pushing medium.
7. Method according to any one of the preceding claims, characterised in that as the cleaning agent is introduced into the space between the two pigs (10a, 11a, 10b, 11b) in the second pig station (7a, 7b), the pressurised cleaning agent is used as the pushing medium.
8. Method according to claim 7, characterised in that the supply of cleaning agent to the space between the two pigs (10a, 11a, 10b, 11b) in the second pig

station (7a, 7b) is ended when the leading pig (11a, 11b) has moved a given distance, and in that the trailing pig (10a, 10b), together with the cleaning agent and the leading pig (11a, 11b), is moved by the pushing medium.

- 5
9. Method according to any one of the preceding claims, characterised in that the pig stations (6a, 7a, 6b, 7b) are flushed with cleaning agent at least when a colour change is made.
- 10
10. Method according to claim 9, characterised in that the pig stations (6a, 7a, 6b, 7b) are flushed alternately with cleaning agent and compressed air.
- 15
11. Method according to any one of the preceding claims, in which the paint application device includes an electrode that is connectable to a high voltage, characterised in that the high voltage is applied to the paint application device (1) only when the pigs (10a, 11a, 10b, 11b) are located at a given minimum distance outside the pig stations (6a, 7a, 6b, 7b) in the pig line (35a, 35b).
- 20
12. Method according to claim 11, characterised in that the cleaning agent is fed to the components (1, 7a, 7b, 56) that are connectable to a high voltage via a line (40) and is conducted away from these components (1, 7a, 7b, 56) via a line (48), the lengths of which lines (40, 48) are artificially increased by coiling in a particular area (42, 49).
- 25
- 30